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EXA	MINER
DUONG	, OANH L
ART UNIT	PAPER NUMBER
2155	
-	2155

DATE MAILED: 09/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)		
	10/074,092	DINKER ET AL.		
Office Action Summary	Examiner	Art Unit		
	Oanh Duong	2155		
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>03</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).				
Status				
1) Responsive to communication(s) filed on 12 February 2002.				
2a)☐ This action is FINAL . 2b)☒ This action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.				
Disposition of Claims				
4) Claim(s) 1-33 is/are pending in the application.				
4a) Of the above claim(s) is/are withdrawn from consideration.				
5) Claim(s) is/are allowed.				
6)⊠ Claim(s) <u>1-33</u> is/are rejected.				
7) Claim(s) is/are objected to.				
8) Claim(s) are subject to restriction and/o	r election requirement.			
Application Papers				
9) The specification is objected to by the Examine	er.			
10)⊠ The drawing(s) filed on <u>12 February 2002</u> is/are: a)□ accepted or b)⊠ objected to by the Examiner.				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).				
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.				
Priority under 35 U.S.C. § 119				
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).				
a) ☐ All b) ☐ Some * c) ☐ None of:				
 Certified copies of the priority documents have been received. 				
2. Certified copies of the priority documents have been received in Application No				
3. Copies of the certified copies of the priority documents have been received in this National Stage				
application from the International Bureau (PCT Rule 17.2(a)).				
* See the attached detailed Office action for a list	of the certified copies not receive	∋d .		
Attachment(s)				
1) Notice of References Cited (PTO-892)	4) Interview Summary			
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	Paper No(s)/Mail D 5) Notice of Informal F	ate Patent Application (PTO-152)		
Paper No(s)/Mail Date	6) Other:	,		
U.S. Patent and Trademark Office PTOL-326 (Rev. 7-05) Office Ac	etion Summary Pa	art of Paper No./Mail Date 20050916		

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DETAILED ACTION

1. Claims 1-33 are presented for examination.

Drawings Objection

2. Figures 1-2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-9, 13-24 and 28-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted Prior Art (APA) in view of Jin et al. (Jin) (US 6,330,689 B1).

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Regarding claim 1, APA teaches a plurality of nodes coupled together, wherein each one of the plurality of nodes is coupled to at least one other one of the plurality of nodes for communicating data between the nodes (Figs. 1 and 2), and

in-process node (Fig. 2) comprising:

an in-process client (client 201, Fig. 2); and

a distributed data manager (Distributed Data Manager 211, Fig. 2),

wherein the in-process client and the distributed data manager for the in-process node are configured to execute within the same computer process on the in-process node, and wherein the distributed data manager for the in-process node is configured to communicate data with the in-process client in a non-serialized format and communicate data with other ones of the plurality of nodes in a serialized format (page 4 lines 12-18); and

out-of-process node (Fig. 1) comprising an out-of-process

client, wherein the out-of-process client is configured to execute within a different process than any distributed data manager, and wherein the out-of-process client is configured to communicate data with other processes or other ones of the nodes in a serialized format (page 2 line 30-page 3 line 3).

APA does not explicitly teach wherein the plurality of nodes in the system comprises at least one in-process node and at least one process node.

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Jin teaches a server architecture wherein application can be run either in-process or out-of-process with the server program (see abstract). Jin teaches a data system comprising wherein the plurality of nodes in the system comprises at least one in-process node and at least one process node (col. 6 lines 42-48).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify APA to include both in-process and out-of process nodes as in Jin. One would be motivated to do so to offer the flexibility to run either or both in-process and out-of-process applications (Jin, col. 6 lines 56-57).

Regarding claim 2, APA teaches the system as recited in claim 1, wherein the inprocess client is configured to request data from the distributed data manager for the inprocess node, and wherein, in response to the client's request, the distributed data manager for the in-process node is configured to return a reference to an object for the data without serializing the data (page 4 lines 15-18).

Regarding claim 3, APA teaches the system as recited in claim 2, wherein the distributed data manager for the in-process node is configured to receive a request for data from another node, serialize the requested data and send the serialized data to the requesting node (page 4 lines 5-15).

Regarding claim 4, APA teaches the system as recited in claim 1, wherein the distributed data manager for the in-process node is configured to receive serialized data

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from another node, de-serialize the data and store the de-serialized data as an object (page 4 lines 5-15).

Regarding claim 5, APA teaches the system as recited in claim 1, wherein said in-process client is configured to send an object reference for the data to the distributed data manager for the in-process node to store data in the in-process node (page 3 lines 30-31).

Regarding claim 6, APA teaches the system as recited in claim 1, wherein all data store operations performed by the distributed data manager in the in-process node store data in a non-serialized object format in a data store of the in-process node (page 4 lines 5-18).

Regarding claim 7, APA teaches the system as recited in claim 1, further comprising a distributed data manager for the out-of-process node, wherein the distributed data manager for the out-of-process node is configured to communicate data with other processes or other ones of the plurality of nodes in a serialized format (page 2 line 30-page 3 line 3).

Regarding claim 8, APA teaches the system as recited in claim 7, wherein the out-of-process client is configured to execute in a separate process and communicate data with the distributed data manager for the out-of-process node in a serialized format

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(Fig. 1, page 1 line 30-page 2 line 2).

Regarding claim 9, APA teaches the system as recited in claim 7, wherein the out-of-process client is configured to request data from the distributed data manager for the out-of-process node, and wherein, in response to the client's request, the distributed data manager for the out-of-process node is configured to send the requested data to the out-of-process client in a serialized format (page 2 line 30-page 3 line 3).

Regarding claim 13, APA teaches the system as recited in claim 7, wherein the distributed data manager for the out-of-process node is configured to replicate data to one or more other ones of the plurality of nodes (page 2 lines 16-17).

Regarding claim 14, APA teaches the system as recited in claim 7

APA does not explicitly teach the distributed data manager for the out-of-process node is comprised within an application server, and wherein the out-of-process client is a web server coupled to the application server.

Jin teaches the distributed data manager for the out-of-process node is comprised within an application server, and wherein the out-of-process client is a web server coupled to the application server (col. 6 lines 30-35).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify APA to include the distributed data manager for the out-of-process node is comprised within an application server, and wherein the out-of-process client is

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a web server coupled to the application server as in Jin. One would be motivated to do so to accommodate dynamic content sessions in which the server dynamically generates and server a response that is tailored to client (Jin, col. 5 lines 62-65).

Regarding claim 15, APA teaches the system as recited in claim 1, wherein the distributed data manager for the in-process node is configured to replicate data stored in the in-process node to one or more other ones of the plurality of nodes (page 3 line 30-page 4 line 2).

Regarding claim 16, APA teaches the system as recited in claim 7

APA does not explicitly teach the distributed data manager for the in-process node is comprised within an application server, and wherein the in-process client is a web server coupled to the application server.

Jin teaches the distributed data manager for the in-process node is comprised within an application server, and wherein the in-process client is a web server coupled to the application server (col. 6 lines 30-35).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify APA to the distributed data manager for the in-process node is comprised within an application server, and wherein the in-process client is a web server coupled to the application server as in Jin. One would be motivated to do so to accommodate dynamic content sessions in which the server dynamically generates and server a response that is tailored to client (Jin, col. 5 lines 62-65).

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Regarding claim 17, APA teaches a method, comprising:

an in-process client requesting data from a distributed data manager for an inprocess node of a distributed data system (page 4 lines 4-5), wherein the in-process client and the distributed data manager for the in-process node execute within the same process on the in-process node (Fig. 2, page3 lines 15-16);

if the requested data is present in a data store managed by the distributed data manager for the in-process node:

the distributed data manager for the in-process node returning the requested data to the in-process client as an object without serializing the data (page 4 lines 3 and lines 15-18);

if the requested data is not present in the data store managed by the distributed data manager for the in-process node:

the distributed data manager for the in-process node retrieving the requested data in a serialized format from another node of the distributed data system (page 4 lines 3-8 and lines 14-15);

the distributed data manager for the in-process node de-serializing the data retrieved from another node into an object (page 4 lines 12-15); and

the distributed data manager for the in-process node returning the requested data to the in-process client as the de-serialized object (page 4 linens 8-10);

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an out-of-process client requesting data from a node (Fig.2, page 2 lines 20-21); and

the out-of-process client receiving the requested data in a serialized format (page 2 line 30-page 3 line 3).

APA does not explicitly teach in-process node and out-of-process node are in the distributed data system.

Jin teaches a server architecture wherein application can be run either in-process or out-of-process with the server program (see abstract). Jin teaches in-process node and out-of-process node are in the distributed data system (col. 6 lines 42-48).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify APA to include both in-process and out-of process nodes as in Jin. One would be motivated to do so to offer the flexibility to run either or both in-process and out-of-process applications (Jin, col. 6 lines 56-57).

Regarding claim 18, APA teaches the method as recited in claim 17, further comprising: the distributed data manager for the in-process node receiving a request for data from another node; the distributed data manager for the in-process node serializing the requested data; and the distributed data manager for the in-process node sending the serialized data to the requesting node (page 4 lines 2-15).

Claim 19 does not teach or define any new limitation above claim 4 and therefore is rejected for similar reason.

Claim 20 does not teach or define any new limitation above claim 5 and therefore is rejected for similar reason.

Claim 21 does not teach or define any new limitation above claim 6 and therefore is rejected for similar reason.

Claim 22 does not teach or define any new limitation above claim 7 and therefore is rejected for similar reason.

Claim 23 does not teach or define any new limitation above claim 8 and therefore is rejected for similar reason.

Claim 24 does not teach or define any new limitation above claim 9 and therefore is rejected for similar reason.

Claim 28 does not teach or define any new limitation above claim 13 and therefore is rejected for similar reason.

Claim 29 does not teach or define any new limitation above claim 14 and therefore is rejected for similar reason.

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Claim 30 does not teach or define any new limitation above claim 15 and therefore is rejected for similar reason.

Claim 31 does not teach or define any new limitation above claim 16 and therefore is rejected for similar reason.

Regarding claim 32, APA teaches a method, comprising:

an out-of-process client requesting data from a distributed data manager for an out-of-process node of a distributed data system (page 2 lines 20-21), wherein the out-of-process client and the distributed data manager for the out-of-process node execute in two distinct processes (page 1 lines 30-31);

if the requested data is present in a data store managed by the distributed data manager for the out-of-process node:

the distributed data manager for the out-of-process node returning the requested data to the out-of-process client as a serialized object (page 2 lines 20-23 and page 3 lines 1-3);

if the requested data is not present in the data store managed by the distributed data manager for the out-of-process node:

the distributed data manager for the out-of-process node retrieving the requested data in a serialized format from another node of the distributed data system (page 2 lines 23-24 and page 3 lines 1-3); and

the distributed data manager for the out-of-process node returning the requested data in a serialized format to the out-of-process client (page 2 lines 27-28);

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an in-process client requesting data from a distributed data manager for an inprocess node of the distributed data system (page 4 lines 4-5), wherein the in-process client and the distributed data manager for the in-process node execute within the same process on the in-process node (Fig. 2, page 3 lines 15-16); and

the in-process client receiving the requested data in de-serialized format page 4 lines 14-18).

APA does not explicitly teach in-process node and out-of-process node are in the distributed data system.

Jin teaches a server architecture wherein application can be run either in-process or out-of-process with the server program (see abstract). Jin teaches in-process node and out-of-process node are in the distributed data system (col. 6 lines 42-48).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify APA to include both in-process and out-of process nodes as in Jin. One would be motivated to do so to offer the flexibility to run either or both in-process and out-of-process applications (Jin, col. 6 lines 56-57).

Claim 33 does not teach or define any new limitation above claim 10 and therefore is rejected for similar reason.

4. Claims 10-12 and 25-27 are rejected under 35 U.S.C. 103(a) as being

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unpatentable over Admitted Prior Art (APA) in view of Jin, and further in view of Crites et al. (Crites) (US 6,097,380).

Regarding claim 10, APA teaches the system as recited in claim 7, wherein said out-of-process client is configured to send serialized data to the distributed data manager for the out-of-process node to store data to the distributed data manager for the out-of-process node (page 2 lines 14-16 and page 2 line 30-page 3 line3),

APA-Jin does not explicitly teach the distributed data manager for the out-ofprocess node is configured to store the data in its serialized format.

Crites teaches a network system wherein one or more servers and a plurality of available media streams is included (see abstract). Crites teaches the distributed data manager for the out-of-process node is configured to store the data in its serialized format (col. 2 lines 36-42 and col. 5 line19-20).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify APA-Jin to store the data in its serialized format as in Crites. One would be motivated to do so to enable application programs to render continuous media streams of different types and from different sources without being aware of the details of the media streams (Crites, col. 1lines 40-43).

Claim 11 does not teach or define any new limitation above claim 10 and therefore is rejected for similar reasons.

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Claim 12 does not teach or define any new limitation above claim 10 and therefore is rejected for similar reasons.

Claim 25 does not teach or define any new limitation above claim 10 and therefore is rejected for similar reasons.

Claim 26 does not teach or define any new limitation above claim 10 and therefore is rejected for similar reasons.

Claim 27 does not teach or define any new limitation above claim 10 and therefore is rejected for similar reasons.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Oanh Duong whose telephone number is (571) 272-3983. The examiner can normally be reached on Monday- Friday, 2:00PM - 10:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571) 272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

O.D September 18, 2005

> SALEH NAJJAR RIMARY EXAMINER